

5790
/023

3

OIPE

RAW SEQUENCE LISTING

DATE: 10/30/2001

PATENT APPLICATION: US/09/814,292

TIME: 12:02:02

Input Set : A:\348022001500.txt

Output Set : N:\CRF3\10302001\I814292.raw

```
4 <110> APPLICANT: Yu, De-Chao
5 Zhang, Hong
6 Henderson, Daniel R.
8 <120> TITLE OF INVENTION: HUMAN UROTHELIAL CELL SPECIFIC UROPLAKIN
9 TRANSCRIPTIONAL REGULATORY SEQUENCES, VECTORS COMPRISING
10 UROPLAKIN-SPECIFIC TRANSCRIPTIONAL REGULATORY SEQUENCES, AND
11 METHODS OF USE THEREOF
14 <130> FILE REFERENCE: 348022001500
16 <140> CURRENT APPLICATION NUMBER: 09/814,292
C--> 17 <141> CURRENT FILING DATE: 2001-10-12
19 <150> PRIOR APPLICATION NUMBER: 60/191,861
20 <151> PRIOR FILING DATE: 2000-03-24
22 <160> NUMBER OF SEQ ID NOS: 46
24 <170> SOFTWARE: FastSeq for Windows Version 4.0
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 2240
28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence
31 <220> FEATURE:
32 <223> OTHER INFORMATION: Human uroplakin II 5' flanking region
34 <400> SEQUENCE: 1
35 tcgataggta cccactatag ggcacgcgtg gtgcacggcc cgggctggtc tggcaacttc      60
36 aagtgtgggc ctttcagacc ggcacatcat gtgttaacgg gaagtcacta ggaatgcaga      120
37 attgattgag caccggtggct cacacctgta atcccaacac tctggggagg caaggcaggt      180
38 ggatcaactg tggtcaggag ttgagacca gcttggccaa catggtgaaa cctcatctct      240
39 actaaaaata caaaaattag ctgggaatgg tggcacatgc ctataatccc agttactcag      300
40 gaggtcgagg caggagaatc atttgaacct gggaggcaga ggttcagtg agccgagatc      360
41 acgcacttgc actccagcct ggggtgacaca gcgagactct gtctcaaaaa aaaaaaaagt      420
42 cagaatttca ggtttcaccc cagaccacct gcattgactg atgagaagct gcattttaac      480
43 aagatccctg gtaattcata cgcattattaa atttggagat gcactggcgt aagaccctcc      540
44 taactctctg ttaggcccat gaggttcttc ttactgtctc ttctccactc accccaaact      600
45 ttgagcctac ccttcccacc ttggcggtaa gacacaaacc tcctccacat tcctaccagg      660
46 accctaagct tcctctggac tgaggaaagt agaattgttc gtggagcaaa cagatatata      720
47 gcaacagctc ctgtacagct ctaaggcttc tggaaatttc acagcctctc ccgacaaagt      780
48 attccacttt ccacaagtaa ctctatgtgt ctgagttctc gtttccactt ttctctctct      840
49 ctctctctct caactttctg agacagagtt tcaatttagt gccacggctg gagtgcaggg      900
50 gccaaacttc ggtctcactg aacctccacc tcctgggttc aagtgtttct cctgtctcag      960
51 cctccagagt agctgggatt acaggcaaac accaccgctg tagtttttgt atttttggtta      1020
52 gagatgggtg ttgcacatat tggccaggct gatctcgaac tctgacctc aggtgatccg      1080
53 cccactctcg cctcccacaa gctgtgggatt acaggcatga gccaccacgc ccggtgtgac      1140
54 tctttcttat tttaatagag atcaaaactct ctgtgttgcc taggtgtggt ttgaaactct      1200
55 ggcctcgagt gatcctccca ctttggcctc ccaaagtgtt gagattacag gcatgagcca      1260
56 ctgtgccttg cctcagttct actacaaaag gaagccagta ccagctacca cccagggtgg      1320
57 ctgtgaggct acaatggagc acacagaaac cctaccaggg gcccggaaga agccccgact      1380
58 cctctccctc cctctgccc agaaactctc cgtctcttct tgatgtagcc cagggccgga      1440
59 ggaggcagtc agggaaagtc tgtctctttt tcatgttate ttaagaggtc tctttctctc      1500
60 attctcagtc caacaaatgg ttgctgccca aggtctgact tgcccacccc caacctctgc      1560
```

ENTERED

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/814,292

DATE: 10/30/2001
 TIME: 12:02:02

Input Set : A:\348022001500.txt

Output Set : N:\CRF3\10302001\I814292.raw

```

61 tggccagggt caatgtctgt ctctctggtc tctccagaag tcttccatgt ccacctctgt 1620
62 cccaccctcc cagaggatcc tgaaacccga tgtgtccctt ggcgccacca gcccttgcct 1680
63 ctccccagagc agcagtaacct aagcctcagt gcactccaag aattgaaacc ctaagtctgc 1740
64 tgccctccccc accagaatgt ttctctctcc attcttaacc actccaggcc ctttcagtga 1800
65 ccccttggag tattctcttc ctacatatca gggcaacttc caaactctac acccttctga 1860
66 ggggtggggg aaagaccctcc accacatcgg gggagcagtc tcccaaggag tggccagctc 1920
67 ccagatgccc gtgcacacag gaacactgcc ttatgcacgg gagtcccgaga agaaggggtg 1980
68 atttctttccc ccactttagt tacaccatca agaccagccc agggcatccc cctctctgac 2040
69 ctgaggggcca gctcccctac ctgaaaaacc tgtctgtctt ccccccctct ttgagctcat 2100
70 agggcccaag gggcaggttg gactggattc cctccagccc cctcccgcgc ccaggacaaa 2160
71 atcagccacc ccagggggcag ggcctcactt gctccaggaa ccccgagcgt ccagcaccta 2220
72 ttccacctcc cagcccagca
74 <210> SEQ ID NO: 2
75 <211> LENGTH: 3592
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Mouse uroplakin II 5' flanking region
82 <400> SEQUENCE: 2
83 ctgaggatc tcggccctct ttctgcctcc ttgtcctaaa tcaatttcat atcttctgag 60
84 acctcagttt gagagaaacy aaccttctca ttctcaagtt gaaaaaaaaa agaggttcaa 120
85 atgggtctcac tcaaaagttac aagccaacac tcaccaactac gactacaatg gccaccata 180
86 gtctgggcat gccccaggag acaggcctgc atattattct agatgactgg gaggcagagg 240
87 ggtggcctag tgaggtcaga ctgtggacag atcaggcaga tgtgggttct gatcccaatt 300
88 cctcaggccc cagaactact gtggttccag aaggggacaa aaggactgca gtcgggaaca 360
89 ggaggtccat ttgagagctg actgagcaga agaggaaagt gaagaaactc tggggcaaga 420
90 gcttacccta ctttacagct ttgtgtctct ctttactcca ggggcgtccc tggttactag 480
91 taaatgtctg ttggtgtgag gaacatatgt gtaaggagga aggagaggga acttgaggga 540
92 gtaagactc aagaatcaat caaggagagg acagcagaga agacagggtt tggggagagag 600
93 actccagaca ttggcccttg ttcccttctt ggcactgtg aaacctctca gaggaaactga 660
94 gtgctgtggc tttaaatgat ctacgactgt tcaagtgaag cctctgtctc aagagtatc 720
95 ctcttgcctc tgtgcggggg cctcccctcc cctctagctc ccaaacctct ctacgcaact 780
96 gtgatggcat aattagatgc gagagctcag accgtcaggt ctgctccagg aaccacccat 840
97 ttcccccaac cccagagaaa ggtcctagtg gaaaagtggg ggccaactgaa gggctgatgg 900
98 ggttctgttc ttccccccat gctgggttga cttaagtct gctagtgtgt tggggggtag 960
99 aagacacagc aacctggggg ctccggctgg gagcaggagg aactctcacc agacgatctc 1020
100 caaatttact gtgcaatgga cgtacaggaa actggttccg atgtagcttc tgatacagtg 1080
101 ggtctgaggt aaaaaccgaa acttaatttc ttccaaaaat ttaagtgtgc attattatt 1140
102 ttatagtgtt gcccatatgt gtgccacagt gtctatgtgg aggtcagagg cgaagtgtgt 1200
103 ggcattggct cctctctcttc ataatgtggc ttctggggac caaatgtcca ggcattgtgt 1260
104 caagagcttt taactgttga gccatctcat ggttttgtta aacttctcat gacgcttaca 1320
105 ggtaacgcag agacacagac tcacatttgg agttagcaga tgcgttatgt gtgtaaacac 1380
106 tcatcacagc acacacacac atactctaac acacacacac acacttata cctcatcaca 1440
107 ctactctgta tacacacaga cacacacaca tgcactctca ctccacata ttcatacaca 1500
108 tccacacaca cactctacca cacacacaga ctcactctca ctccacaca cacacacaca 1560
109 ctactctata cacacacaca gacacacata ctcatcacca cacacagaca ccaactata 1620
110 atcatcataa cacagacaca ctctacatgt tgcacacaca cactcatcca cacacacaca 1680
111 ctcatcataa cacaactcca tacacacaca cactcatcca cacacacagc aggtttttct 1740
112 cagctgcctt ttgggtggag actgggaact atttctgttt ttcagctcct tggctttttg 1800

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/814,292

DATE: 10/30/2001
 TIME: 12:02:02

Input Set : A:\348022001500.txt
 Output Set : N:\CRF3\10302001\I814292.raw

```

113 tcccttttaga tgagatctcc tctcacttt acacacagaa agatcacaca cgaggggagaa 1860
114 ctggcggtgc ggaagagggc tacacggtag ggtgtcaggg tcaggagatc tctctgcaa 1920
115 gctctcaaac tcacatagc acagtgttta cgtgaggatt taggaggaat caggaaaggg 1980
116 attgtgttac tgcagagcag accatatagg tccactcta agcccccatt gaaattagaa 2040
117 gtgagacagt gtgggataaa aagagcagat ctctggtcac atttttaaag ggaatgagg 2100
118 gtctctgtgc tttaagcctt cccatctccc tccaatcccc cctcaccttc cccaccctaa 2160
119 cccctccccc gtttctggag gaggcagagt gcgtctcttc cctgcccctgc cgagctgctc 2220
120 acctggtcgt ctagaggctg tgctttgcgg tctccatgga aaccattagt tgctaaagcaa 2280
121 ctggagcacc atctgtgctg agctcaggtc ctatcagagt caccatagctg agacacccac 2340
122 gccccctgag ccactttgca gtgacaagcc cctggccagc gtctcagaga gaggtgactg 2400
123 agtagccttt caggaggcca tgcagagccc cctggccagc gtctcagaga gaggtgactg 2460
124 agtggggcca tgtcactcgt ccatggctgg agctgtggct gctgatgga tgatttaagt acccaatctg 2520
125 ggccaggaga gaaccagagg agctgtggct gctgatgga tgatttaagt acccaatctg 2580
126 ttgtcccagg catcgaaacc cagagcgacc tgcacacatg ccacccctcca cccgcccctc 2640
127 ggccaggaga gaaccagagg agctgtggct gctgatgga tgatttaagt acccaatctg 2700
128 ttgtcccagg catcgaaacc cagagcgacc tgcacacatg ccacccctcca cccgcccctc 2760
129 acctcctctg ctctctgtta caggattgtt ttgtcttgaa ttgtctctcc agtttagctg 2820
130 gattgtttgt ttttttttt ttaacataag gtctctctg tagccctag ctgtctctgt 2880
131 actcactctg tagaccagcg tggcctcaaa ctacgaaatc caactctctc ccaagtgtcg 2940
132 gattgtttgt ttttttttt ttaacataag gtctctctg tagccctag ctgtctctgt 3000
133 tttactgcgt acccgttgca caaccgcttg ctgtccaaat ctgtttgat ctactccacc 3060
134 gccccctagc cttgctggag tggacctacg tttacttgga agccttcaat aacttccctt 3120
135 gcttccacct tctggagaaa tctgaagcgt cacactgata cccctcgctg ctcccagagt 3180
136 ctgagctttc taggcctcag ttaaatacca gaattggatc taaggctctg ctatcccacc 3240
137 cctacctaac caaccccctc ctctcccacc cttaactagc aaagcccctt caacccttgg 3300
138 ggccttttct acactacac accaggggcaa ttttagaact ctatggctct ctagaaaacg 3360
139 cctacctctc tggagactga cctctacag tccaggaggc agacactcag acagaggaa 3420
140 tctgtctctc agtcgggga gttccagaaa gagccatact cccctgcaga gctaactaag 3480
141 ctgcccaggc ccagccagag catcccccct tagccgaggg ccagctcccc agaattgaaa 3540
142 acctgtctg ggcccctccc tgaggctaca gtgcgcaagg ggcaggttgg actggattcc 3592
143 cagcagcccc tccactccg agacaaaatc agctaccctg gggcaggcct cattggcccc
144 aggaaccccc agcctgtcag cactctgtcc aggatccagt cccagcgag ta
144 <210> SEQ ID NO: 3
145 <211> LENGTH: 307
146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Nucleotide sequence for ADP
150 <400> SEQUENCE: 3
151 gatgacgggc tcaaccatcg cgcccacaac ggactatcgc aacaccactg ctaccggact 60
152 aacactctgc ctaaatttca cccaagttca tgctttgtc aatgactggg cgactctgga 120
153 catgtgtggg ttttccatag cgcttatgtt tgcttgcctt attattatgt ggctatttgg 180
154 ttgctctaaag cgcagacgcg ccagaccccc catctatagg cctatcattg tgctcaacc 240
155 acacaatgaa aaaattcata gattggacgg tctgaacca ttgtctcttc ttttaagta 300
156 tgattaa
160 <210> SEQ ID NO: 4
161 <211> LENGTH: 101
162 <212> TYPE: PRN
163 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Amino acid sequence for ADP

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/814,292

DATE: 10/30/2001

TIME: 12:02:02

Input Set : A:\348022001500.txt

Output Set: N:\CRF3\10302001\i814292.raw

```

168 <400> SEQUENCE: 4
169 Met Thr Gly Ser Thr Ile Ala Pro Thr Thr Asp Tyr Arg Asn Thr Thr
170 1 5 10 15
171 Ala Thr Gly Leu Thr Ser Ala Leu Asn Leu Pro Gln Val His Ala Phe.
172 20 25 30
173 Val Asn Asp Trp Ala Ser Leu Asp Met Trp Trp Phe Ser Ile Ala Leu
174 35 40 45
175 Met Phe Val Cys Leu Ile Ile Met Trp Leu Ile Cys Cys Leu Lys Arg
176 50 55 60
177 Arg Arg Ala Arg Pro Pro Ile Tyr Arg Pro Ile Ile Val Leu Asn Pro
178 65 70 75 80
179 His Asn Glu Lys Ile His Arg Leu Asp Gly Leu Lys Pro Cys Ser Leu
180 85 90 95
181 Leu Leu Gln Tyr Asp
182 100
184 <210> SEQ ID NO: 5
185 <211> LENGTH: 29
186 <212> TYPE: DNA
187 <213> ORGANISM: Artificial Sequence
189 <220> FEATURE:
190 <223> OTHER INFORMATION: PCR Primer 66.119.1
192 <400> SEQUENCE: 5
193 accggtctcg aggatctcgg ccctcttttc
195 <210> SEQ ID NO: 6
196 <211> LENGTH: 26
197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: PCR Primer 66.119.2
203 <400> SEQUENCE: 6
204 accggtactg cgctgggact ggatec
206 <210> SEQ ID NO: 7
207 <211> LENGTH: 34
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: PCR Primer 100.24.1
214 <400> SEQUENCE: 7
215 aagcttaccg gtactgcgct gggactggat cctg
217 <210> SEQ ID NO: 8
218 <211> LENGTH: 36
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: PCR Primer 100.27.1
225 <400> SEQUENCE: 8
226 accatggacc ggtctcgagg atctcggccc tctttc
228 <210> SEQ ID NO: 9
229 <211> LENGTH: 36

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/814,292

DATE: 10/30/2001
 TIME: 12:02:02

Input Set : A:\348022001500.txt
 Output Set: N:\CRF3\10302001\I814292.raw

```

230 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
234 <223> OTHER INFORMATION: PCR Primer 100.24.3
236 <400> SEQUENCE: 9
237 accatggacc ggtaagtacc caatctgttg-tccag 36
239 <210> SEQ ID NO: 10
240 <211> LENGTH: 35
241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: PCR Primer 100.24.2
247 <400> SEQUENCE: 10
248 accatggacc ggtcaactagc cttgctggac tggac 35
250 <210> SEQ ID NO: 11
251 <211> LENGTH: 24
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: PCR Primer 100.84.1
258 <400> SEQUENCE: 11
259 aagaatcaagg atcaaggcca agtc 24
261 <210> SEQ ID NO: 12
262 <211> LENGTH: 25
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: PCR Primer 100.84.2
269 <400> SEQUENCE: 12
270 aatgctgggc tgggaggtg aatag 25
272 <210> SEQ ID NO: 13
273 <211> LENGTH: 29
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: PCR Primer 100.113.1
280 <400> SEQUENCE: 13
281 aggggtaccc actatagggc acgctggt 29
283 <210> SEQ ID NO: 14
284 <211> LENGTH: 32
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: PCR Primer 100.113.2
291 <400> SEQUENCE: 14
292 acccaagctt gggatgctgg gctgggaggt gg 32
294 <210> SEQ ID NO: 15
295 <211> LENGTH: 39
296 <212> TYPE: DNA

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/814,292

DATE: 10/30/2001

TIME: 12:02:03

Input Set : A:\348022001500.txt

Output Set: N:\CRF3\10302001\I814292.raw

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date